# Reforming the Mortgage Interest Deduction

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TABLE OF CONTENTS

## INTRODUCTION

The mortgage interest deduction (MID) is one of the oldest and largest tax expenditures in the federal income tax and is the largest single federal subsidy for owner-occupied housing. The president's fiscal year 2010 budget reports that, in 2012, the MID will cost the federal Treasury an estimated $131 billion, much more than the total of *all* outlays by the Department of Housing and Urban Development ($48 billion). Homeowners also benefit from other federal tax preferences, including deductibility of residential property taxes on owner-occupied homes ($31 billion), and exclusion of tax on the first $250,000 ($500,000 for joint returns) of capital gains on housing ($50 billion).

The MID was not originally placed in income tax law to subsidize home ownership. When the modern federal income tax was enacted in 1913 shortly after ratification of the 16th Amendment to the U.S. Constitution, all interest payments were made deductible on the grounds that interest payments were an expense of earning business and investment income. Congress made no distinction, however, between interest incurred for the production of taxable income (such as interest on business loans) and interest incurred to generate non-taxable "imputed" returns from homes and consumer durables.[1] The deduction had little effect on housing investment before World War II because only the very highest-income individuals paid any income tax.

The conversion of the income tax from a "class" to a "mass" tax during World War II, followed by a large postwar growth in home ownership rates fueled by the increased availability of long-term mortgage finance, converted the mortgage interest deduction from a provision used by only a few taxpayers into a major subsidy for middle- and upper-middle-income homeowners. By the time the Treasury and congressional agencies began publishing annual lists of tax expenditures in the 1970s, the mortgage interest deduction had become one of the largest single preferences in the tax law.

The 1986 Tax Reform Act (TRA 86) eliminated many tax preferences in the federal income tax to finance lower marginal tax rates and higher personal exemptions, but left the deductibility of mortgage interest largely intact.[2] TRA 86 eliminated the deductibility of all consumer interest, including credit card debt and loans to finance cars, furniture, and other consumer durable items. But TRA retained the deductibility of mortgage interest on loans up to $1 million. In addition to the deduction on new (and re-financed) mortgage loans, taxpayers may deduct up to $100,000 of

[1] Subsequently, however, Congress did eliminate the deductibility of interest on debt used to finance the purchase of tax-exempt municipal securities, with an exception for commercial banks. The exception for commercial banks was repealed in 1986.

[2] The original Treasury Department tax reform proposal was developed in 1984 in response to a request by President Reagan in January 1984 to develop a plan to "simplify the tax code so that all taxpayers big and small are treated fairly and make the tax base broader so that personal tax rates could come down, not go up." The president asked the Treasury to present their recommendations after the 1984 election. The president allowed the Treasury wide discretion to eliminate tax preferences, with the exception of a specific commitment in a May 1984 speech that the administration would retain the home mortgage interest deduction.

interest on home equity loans (i.e., additional housing debt incurred subsequent to the initial home purchase).[3]

Although the mortgage interest deduction rivals Social Security benefits as a "third rail" provision that elected officials would tamper with at their peril, many analysts have nonetheless raised concerns about it. The Congressional Budget Office usually includes proposals to eliminate or scale back the MID in its list of budget reduction options.[4] The MID disproportionately benefits taxpayers in the top fifth of the income distribution (Toder, Harris, and Lim 2009). Those who do not itemize deductions on their tax returns receive no benefit and the subsidy rate is larger for individuals in higher marginal tax rate brackets. Because most who benefit would own homes without the deduction, it mostly provides an incentive to live in more expensive homes, not to own instead of rent. Other countries without an MID have similar homeownership rates. If the government wishes to promote homeownership, a refundable tax credit available to all taxpayers, not just itemizers or those with positive tax liability, would be more effective. Given the large and growing projected federal budget deficits, it is worth reexamining the effectiveness of all federal spending programs, including those embodied in the federal income tax.

The next section briefly reviews issues and findings from previous research. We then present new estimates of the deduction's distributional benefits by income group, family type, and race/ethnicity as well as the distributional effects of proposals to eliminate, scale back, or replace the MID with more broad-based tax incentives.

## Issues and Findings of Previous Literature

The main argument for subsidizing homeownership is that ownership may provide positive spillover effects to individuals other than the owner. For example, it is possible that homeowners take better care of their property, are more engaged in local politics and community building, and are more willing to invest in the community than renters because the higher home values that community amenities produce benefit them directly.[5] Previous research has found evidence that homeowners are more likely to perform maintenance and have higher rates of civic participation than renters and that crime rates are lower in areas with more homeowners (DiPasquale and Glaeser 1999; Galster 1983; Glaeser and Sacerdote 2000; Glaeser and Shapiro 2003; Rossi and Weber 1996). The direction of causality between homeownership and these spillover benefits, however, is difficult to demonstrate. People who are more likely to participate in community activities may also be more

[3] In practice, individuals often use the proceeds of home equity loans to purchase cars and other durables, thereby making the costs of financing these items effectively deductible to homeowners.

[4] See, for example, Congressional Budget Office, "Budget Options," vol. 2 (Washington, DC: CBO, 2009), http://www.cbo.gov/ftpdocs/102xx/doc10294/08-06-BudgetOptions.pdf.

[5] The incentive for homeowners to keep property values high can also be a negative externality; for example, it could contribute to resistance to racial integration of neighborhoods.

likely to own homes, so that homeownership itself does not necessarily cause higher community engagement.

There are other reasons for encouraging homeownership by low-income households. Homeownership is a means of asset accumulation and may be an important component of a strategy to promote social mobility through asset building. Homeownership subsidies may also counterbalance rental subsidies that would bias tenure choice for low-income individuals toward renting instead of owning. On the other side, however, recent events in the subprime mortgage market remind us that policies to promote homeownership can hurt low-income households if they encourage them to take on mortgage commitments they cannot afford.

Even assuming homeownership subsidies are desirable, researchers find that the current MID is not a cost-effective tool for increasing homeownership because its main beneficiaries are not individuals on the margin between renting and owning. The deduction is only available to itemizing taxpayers and its value rises with an individual's tax rate. The result is that most benefits from the deduction are concentrated at the high end of the income distribution, where homeownership rates are likely to be high with or without the deduction. High-income taxpayers are much more likely to itemize than low-income individuals. Poterba and Sinai (2008) find that 85.5 percent of tax units with annual incomes between $75,000 and $125,000 and over 98 percent of tax units with incomes above $125,000 itemize, while only 23.4 percent of those making less than $40,000 itemize. The average value of the MID rises steadily with income from $91 for those with annual incomes less than $40,000 to $5,459 for those making more than $250,000.

Empirical research has found little evidence that the MID increases homeownership. Glaeser and Shapiro (2003) note that the value of the deduction has risen and fallen by tenfold in the past 50 years while homeownership rates have remained nearly unchanged between 63 and 68 percent. Their formal analysis of time-series data finds no effect of the MID on homeownership rates. Cross-national comparisons in Gale, Gruber, and Stephens-Davidowitz (2007) also conclude that the mortgage interest deduction is not correlated with higher homeownership rates. Gale (1997) finds that, similar to the U.S. experience, changes in the value of the MID in the United Kingdom are not associated with changes in the homeownership rate. Mann (2000) compares homeownership rates and mortgage interest tax treatment across ten countries and also finds no consistent relationship between homeownership and the interest deduction.

The MID also has the potential to affect homeownership through its impact on home prices. The subsidy makes individuals willing to pay a higher price for the same home, but the resulting effect on home prices depends on the elasticity of the housing supply. The effect of the deduction on house prices is likely to vary across and within regions due to differences in tax rates and the availability of undeveloped land. The deduction will raise prices more in densely populated areas with low housing-supply elasticities and high tax rates. At the extreme, Capozza, Green, and Hendershott (1996) estimate an upper-bound estimate of the effect on prices at 10 percent, assuming that the housing stock is totally inelastic.

The indirect effect of the MID on homeownership through higher home prices could fully offset any direct effect from the increased demand to own homes. For example, Bourassa and Yin (2007), in an analysis of urban adults between 25 and 34 years old, estimate that eliminating the mortgage interest deduction would increase, instead of decrease, their homeownership rate from 41.5 to 42.5 percent.[6] This occurs because the positive effect on ownership by young adults through lower home prices more than offsets the negative effect from the loss of the deduction. This study also illustrates the regional variation in the effect of the deduction. Cities with relatively high-priced, space-constrained markets, such as San Francisco, experience larger increases in homeownership rates when the deduction is eliminated than cities like Birmingham and Tampa, where the price effect is minimal. The overall estimated change in the homeownership rate from eliminating the MID, however, is fairly small.

Gyourko and Sinai (2001) also examine the regional distribution of the mortgage interest deduction. They find that the benefits from the deduction are unevenly concentrated between states and cities as well as within cities. Assuming the deduction were financed by a lump-sum, per-household tax, they find that the MID provides net positive benefits to only 20 percent of states and 10 percent of metropolitan areas. Three large metropolitan areas receive over 75 percent of the net positive benefits: New York City–Northern New Jersey, Los Angeles–Riverside–Orange County, and San Francisco–Oakland–San Jose. Within metropolitan areas that receive net benefits, the benefits disproportionately accrue to wealthy households. The authors argue that the mortgage interest deduction is more regressive than the tax system is progressive, in part because in addition to receiving a larger tax benefit per dollar of deduction, wealthy individuals also own more expensive homes.

Some researchers have argued that replacing the MID with a credit would boost homeownership rates by making the incentive to purchase a home more equal across the income distribution. This could encourage individuals with low marginal tax rates who currently do not itemize to become homeowners because they can benefit from a mortgage interest credit. Green and Vandell (1999) estimate that replacing both the MID and the property tax deduction with a revenue-neutral credit of $1,173 for all homeowners would raise the overall homeownership rate by 3 percent. Although the total subsidy to housing would remain the same, the shift to a credit would have important distributional implications. The policy would increase homeownership for individuals with household incomes of less than $40,000 per year by enough to more than offset a decrease in the homeownership rate by those making more than $40,000. More minorities would become homeowners, while the homeownership rate for whites would decrease. Reschovsky and Green (1998) find similar results, estimating a 3 percent rise in the homeownership rate from replacing the MID with a refundable credit equal to 21 percent of interest. Gale, Gruber, and Stephens-Davidowitz (2007) propose replacing the MID with a refundable first-time homebuyers credit equal to $6,000 for

[6] Higher prices caused by the MID could possibly delay homeownership for 25- to 34-year-olds, permanently keeping them renters.

married couples and $3,000 for others. They argue that the credit would increase homeownership, cost less than the current MID, and be more progressive. Carasso, Steuerle, and Bell (2005) estimate that nearly 50 percent of tax units would see a tax cut if the MID were replaced with a revenue neutral, fully refundable credit equal to 1.03 percent of home value up to $100,000. This credit would also increase progressivity; on average, individuals in the bottom four quintiles would see an increase in after-tax income, while those in the top quintile would see a decrease.

In conclusion, many studies have demonstrated a correlation between increased social connectedness and higher homeownership rates, although whether homeownership itself produces these benefits is unclear. But even if community benefits justify a subsidy for homeownership, evidence suggests the MID is not the way to deliver it. Previous research suggests that the MID has little impact on homeownership rates because its primary beneficiaries are not those on the border between renting and owning. Studies suggest that replacing the deduction with a credit could increase overall homeownership rates by shifting the subsidy from high-income taxpayers to lower-income ones who have lower current rates of homeownership and are more likely to become homeowners in response to a subsidy. Some evidence even suggests that replacing the MID with a credit that is more broadly available could increase homeownership at a lower budgetary cost to the federal government.

## Effects of Reforming the Mortgage Interest Deduction by Income Group and Family Type

The mortgage interest deduction mainly benefits homeowners in the top fifth of the income distribution because it is only available to those who itemize deductions on their tax returns and is worth more to itemizing taxpayers in higher tax brackets. We estimate the distributional effects of several proposals to reform the mortgage interest deduction by income group and family type. These proposals include completely eliminating the mortgage interest deduction, replacing the deduction with more progressive mortgage interest subsidies, and limiting the deduction for those in the highest tax brackets.

We display two groups of estimates. The static estimates assume no behavioral responses. For an alternative set of estimates, we assume some taxpayers pay down their mortgage in response to the elimination of the deduction or substitution of smaller interest rate subsidies. For both groups of estimates, we assume no changes in housing consumption or housing tenure choice. In other words, we are not estimating how policy changes would affect homeownership rates, but rather how they would affect tax liability and after-tax income, assuming no changes in real economic behavior.

### *Policies Estimated*

We estimate the effects of eliminating the mortgage interest deduction, replacing it with alternative forms of tax credits for interest paid, and limiting the value of the deduction to 28 percent. All estimates are for 2012.

*Eliminate the mortgage interest deduction*. Under this option, the mortgage interest deduction would be eliminated, without being replaced by an alternative subsidy for mortgage interest. The increased revenue from eliminating the deduction could be used to pay for lower tax rates across the board, refundable credits or grants to taxpayers, increased federal spending, or debt reduction.

*Replace the mortgage interest deduction with revenue-neutral mortgage interest subsidies*. Under these four options, the mortgage interest deduction would be replaced with alternative tax subsidies for interest payments that keep total federal tax receipts unchanged. The two alternative subsidy designs are a tax credit for a fixed percentage of all interest paid and a tax credit for 100 percent of a fixed dollar amount of interest paid. For both the percentage credit and the capped 100 percent credit, we estimate the effects of making the credit either non-refundable (available only up to the amount of positive federal income tax liability) or refundable. All four credit options are available to both itemizers and non-itemizers.

*Limit the mortgage interest deduction for high-income taxpayers to the 28 percent bracket*. Under this option, the tax saving from deducting mortgage interest for taxpayers in the 33 and 35 percent brackets would be limited to 28 percent of home mortgage interest paid. The president's 2010 budget included a similar proposal for all itemized deductions as an option to finance health care reform, but Congress did not enact it. This proposal was also included in the president's 2011 budget.

### *Assumption for Estimates*

*Data and methodology.* The estimates use tax return data from the Urban–Brookings Tax Policy Center Microsimulation Model (TPC model). The TPC model calculates tax liability for a representative sample of households under current law and alternative tax rules. The sample includes over 130,000 individual income tax returns filed in 2004 from the public use file produced by the Statistics of Income Division (SOI) of the Internal Revenue Service. The data source is similar to data used by the Congressional Budget Office (CBO), the Joint Committee on Taxation, and the Treasury's Office of Tax Analysis for their revenue and distributional estimates of tax policy proposals, except for some changes in the sample and the elimination of certain data fields to mask the identity of individual taxpayers.

TPC augments the tax return sample with data on non-filers, based on a statistical match between the SOI and the Current Population Survey. The TPC model includes a detailed tax calculator incorporating parameters of current, past, and future tax laws, which can compute individual income taxes paid by all tax units. Documentation of the model is supplied in Rohaly, Carasso, and Saleem (2005).

The data in the TPC model are projected to tax years 2009–2019, based on CBO economic forecasts and on the most recently published data on the distribution of individual income and income sources by income group from the SOI. TPC has also statistically matched to the tax returns data on wealth

holdings by income group from the Survey of Consumer Finances and imputed itemized deductions (including mortgage interest paid) to non-itemizers.

*Baseline assumptions.* We estimate the distributional effects of all proposals assuming otherwise that the income tax law in effect today remains unchanged, with two exceptions. First, we assume that the Bush administration tax cuts enacted in 2001 and 2003 and extended in 2006 are made permanent. Second, we assume that the 2009 parameters of the alternative minimum tax (AMT) are made permanent and indexed to changes in the consumer price index. These two modifications of current law mean that automatic tax increases scheduled to take effect in 2010 (from reductions in AMT exemptions) and 2011 (from expiration of the Bush tax cuts) will not occur. These assumptions are almost the same as those used in the Administration's baseline.[7] We display revenue effects relative to both a current law baseline and this "current policy" baseline.[8]

*Differences between static estimates and estimates with behavioral response.* Both the static and behavioral response estimates assume no change in real economic behavior in response to the tax proposals. Taxpayers do not change their total consumption of housing or housing tenure (own or rent) status. They also do not change their work effort, saving, or other real economic decisions in response to changes in their marginal tax rates that eliminating the MID might produce.

For the behavioral response estimates, however, we do assume that taxpayers may change their financial portfolios in response to eliminating the MID. If the MID were eliminated, taxpayers holding financial assets that generate positive taxable income could reduce their tax liability by selling these tax-generating assets and using the proceeds to pay off mortgage debt. Their net wealth would remain unchanged, but their taxes would go down because they would not be issuing non-deductible debt to hold taxable assets. Following Gale, Gruber, and Stephens-Davidowitz (2007), we assume that taxpayers will first reduce their taxable interest income and then their taxable dividends and capital gains to offset any non-deductible interest.

This financial response enables households with other taxable assets to finance housing investment at the after-tax cost of funds even without the MID. Effectively, their opportunity cost of holding more housing wealth is that they can hold less wealth in other assets. In contrast, households without

[7] The administration also includes in its baseline a few of the temporary stimulus provisions enacted in 2009.

[8] The baseline used in our estimates of the budgetary effects of the administration's policies assumes the Bush tax cuts and the AMT "patch" are extended. In contrast, the baseline used to estimate tax expenditures in the Analytical Perspectives Section of the fiscal year 2011 budget assumes the Bush tax cuts expire as scheduled at the end of 2010 and the AMT patch expires at the end of 2009. Because marginal tax rates are higher under this "current law" baseline than under the "current policy baseline," the mortgage interest deduction costs more under current law than in the current policy baseline. Our estimates also differ from those reported in the fiscal year 2011 budget because they use 2009 CBO economic assumptions instead of the administration's February 2010 economic projections.

other financial wealth (mostly younger households) will see their net cost of housing finance increase when the MID is eliminated.[9]

### *Revenue Estimates*

Eliminating the mortgage interest deduction would increase calendar year tax liability by $108 billion in 2012, relative to current law, and by about $1.26 trillion over 10 years (table 1). Compared with the current policy baseline, which assumes the Bush tax cuts are extended and the 2009 AMT exemptions, rate bracket threshold, and phase-out exemption thresholds are extended and indexed for inflation, eliminating the mortgage deduction would raise $88 billion.

The revenue gains are less if we assume that individuals holding taxable assets sell some of these assets to reduce their mortgage debt if the deduction is eliminated. The 2012 increase in tax liability then declines to $91 billion compared with the current law baseline and $75 billion compared with the current policy baseline.

Limiting the mortgage interest deduction to 28 percent of interest paid for individuals in the 33 and 35 percent rate brackets would raise only a fraction of the amount raised by eliminating the deduction. Absent behavioral changes, the proposal would increase tax liability by about $3 billion in 2012 and $40 billion over 10 years relative to the current baseline. If taxpayers pay off their mortgages to reduce tax liability, the proposal would instead raise slightly under $3 billion in 2012 and $38 billion over 10 years.

### *Distributional Estimates by Income Group*

*Eliminating or scaling back the mortgage interest deduction.* Eliminating the mortgage interest deduction would raise taxes by an average of $559 over all tax units, including those not using the deduction, and reduce after-tax income on average by slightly less than 1 percent (table 2a). Slightly less than a quarter of all tax units would see their taxes increase. The effects would vary greatly across income groups. Less than 1 percent of tax units in the bottom quintile and slightly over a fifth in the middle-income quintile would pay more tax, compared with almost 70 percent in the top quintile. Within the top quintile, the largest share paying higher taxes would be those between the 90th and 95th percentiles of the income distribution. Eliminating the deduction affects a slightly smaller share of tax units at very top of the distribution (60 percent) because many have paid off their mortgages.

[9] The scenarios where the MID is replaced by a fixed percentage interest subsidy are more complicated. In these scenarios, households are assumed to reduce their holdings of taxable financial wealth only to the extent the marginal tax rate they face on income from those assets is higher than the percentage subsidy rate. For example, if a taxpayer is in the 33 percent bracket, and the MID is replaced with a 20 percent interest credit, she will still reduce her interest income (taxed at 33 percent) and interest deductions (deducted at 20 percent), but no longer reduce her capital gains and dividends (taxed at 15 percent).

The percentage reduction in after-tax income from eliminating the deduction would be largest for taxpayers in the 80th to 99th percentiles of the distribution. These upper-middle-income households would be affected more than tax units in the bottom four quintiles because they are more likely to own homes and itemize deductions and because the higher marginal tax rates they face make deductions worth more to them than to lower-income taxpayers. The very highest income taxpayers, however, will experience a relatively small drop in income (about 0.4 percent on average) because, at the very highest income levels, mortgage interest payments decline sharply as a share of income.

Limiting the mortgage interest deduction to 28 percent of interest paid in the 33 and 35 percent rate brackets would affect only the very highest income taxpayers. Taxes paid would increase for about 40 percent of tax units in the 95th to 99th percentiles of the income distribution and about 55 percent in the top 1 percent. The absolute tax increase would be largest for those in the top 1 percent, but the percentage reduction in after-tax income would be largest for those in the 95th to 99th percentiles.

*Revenue-neutral substitution of mortgage interest credits for the mortgage interest deduction*. We simulated four options for replacing the mortgage interest deduction with a mortgage interest credit (table 3a). In all four options, both itemizers and non-itemizers are allowed to claim the credit, in contrast to the current deduction, which is only available to tax filers who itemize deductions. All four options provided the same total subsidy to homeownership as the current mortgage interest deduction.

- A non-refundable credit equal to 20 percent of mortgage interest paid would cost the same as the current mortgage interest deduction. Replacing the deduction with a non-refundable credit would raise after-tax incomes in the bottom 80 percent of the distribution, with taxpayers in the middle income quintile receiving the largest average gain as a share of after-tax income. The lowest income taxpayers, however, although they lose very little from elimination of the mortgage interest deduction, also would receive little net benefit from substituting a non-refundable credit. Taxpayers in the top quintile would see their after-tax incomes drop because the tax saving per dollar of interest paid at 20 cents on the dollar is much less than the tax saving from a deduction in their tax bracket.
- A non-refundable credit equal to 100 percent of the first $2,030 of interest paid (and nothing for interest greater than the threshold) would be more redistributive to middle-income families than the fixed percentage interest credit.[10] Middle-income people would benefit more because they on average pay less than $10,150 per year in mortgage interest, so they gain more from a $2,030

[10] We assume that rules would be in place to prevent individuals who have paid off their mortgages to refinance in order to receive the 100 percent credit. As a practical matter, however, this proposal may create some enforcement problems and provide an incentive for some new home buyers to borrow more than they otherwise would to take advantage of the credit.

credit than from a credit of 20 percent of interest paid.[11] Correspondingly, high-income people would lose more under the 100 percent capped credit than under the 20 percent matching credit because they on average claim larger amounts of interest deductions.

- A refundable credit equal to 17.1 percent of mortgage interest paid would cost the same as a non-refundable 20 percent credit. Compared with a non-refundable credit, it would raise after-tax incomes more for tax units in the bottom three quintiles of the income distribution, raise incomes less for tax units in the fourth quintile, and lower after-tax incomes more for taxpayers in the top quintile. Taxpayers in the bottom three quintiles would benefit from being able to claim more of the subsidy if it is refundable, with the gain from switching to a refundable credit largest in the bottom quintile. Higher income taxpayers would be worse off because they can already fully use a non-refundable credit, so are better off with the higher credit rate the non-refundable subsidy provides.
- A 100 percent refundable credit up to a maximum of $1,490 would, among all these incentives, provide the largest gains to taxpayers in the bottom quintile of the income distribution and impose the largest losses on those in the top quintile of the distribution. Taxpayers in the fourth quintile would on average still experience a gain in after-tax income, but the gain would be slightly less than under the refundable percentage credit.

Comparing the four options for replacing the mortgage interest deduction with an interest credit, tax units in the bottom four quintiles benefit under all four options (table 4a). Taxpayers in the bottom three quintiles benefit the most under the 100 percent capped refundable credit, while those in the fourth quintile gain the most under the 100 percent capped non-refundable credit. Taxpayers in the top fifth of the income distribution lose under all four options. They incur the largest losses under the capped 100 percent refundable credit and the smallest losses under the 20 percent non-refundable matching credit.

### *Distributional Estimates by Family Type and Age*

Among family types, elimination of the mortgage interest deduction has the biggest income impact on married taxpayers with children (table 5a). It would raise their taxes on average by $1,464 per tax unit (1.4 percent of after-tax income), compared with $667 for married couples with no children (0.7 percent of after-tax income), $250 for singles with children (0.7 percent of after-tax income), and $241 for singles with no children (0.7 percent of after-tax income). Non-elderly tax units (tax units with both head of household and spouse under age 65) would be hit harder than elderly tax units, losing 1 percent (compared with 0.3 percent) of after-tax income. Elderly tax units are more likely to

[11] For example, if a taxpayer currently claims a mortgage interest deduction of $8,000 and is in the 15 percent bracket, the tax saving is $1,200. A 20 percent interest credit would be worth more to this taxpayer than the deduction ($1,600), but less than a credit equal to the minimum of 100 percent of interest paid or $2,300.

have paid off their mortgages and in general have a larger share of their income from non-taxable sources (such as the untaxed portion of Social Security benefits) than tax units under age 65.

The proposal to limit the benefit of the mortgage interest deduction in the top tax brackets to 28 percent of interest paid affects only 1.6 percent of tax units, but it raises tax liability for 4.6 percent of married taxpayers with children. A larger share of non-elderly taxpayers (1.8 percent) see their taxes increase than elderly taxpayers (0.9 percent). The average tax increase and average drop in after-tax income is also larger for married couples with children than for others and larger for non-elderly tax units than for elderly ones.

Replacing the mortgage interest deduction with an interest credit reduces after-tax income (raises taxes) for married families with children, who benefit most from the deduction, and raises after-tax incomes for other family types, but generally the net gains and losses are modest (table 6a). Taxpayers over age 65 lose from substituting a credit for the deduction and taxpayers under age 65 gain slightly. Comparing all the options among family types and between over and under 65 taxpayers (table 7a), married couples and singles with no children benefit the most from the non-refundable, capped 100 percent credit and benefit the least from the refundable matching credit. Singles with children benefit most from the refundable, capped 100 percent credit and least from the non-refundable matching credit. Married couples with children are on average net losers under all four options, losing the most from replacing the MID with the 100 percent capped credits (both refundable and non-refundable) and losing the least from replacing the MID with matching credits. In all cases, average changes in after-tax income for all family types are much less than 1 percent. Taxpayers over age 65 gain on average from substituting all the mortgage credit options for the MID. The capped credits produce larger net gains for them than the matching credits. Taxpayers under age 65 experience very modest average net losses (less than 0.1 percent of after-tax income) from all the options.

### *Estimates with Behavioral Responses*

Estimates with behavioral response show a similar pattern as the static estimates, except that eliminating the MID raises less from the highest income taxpayers—the ones most able to respond to elimination of the MID by paying down their mortgages—when portfolio behavior is included (table 2b). Eliminating the MID still reduces after-tax income more for higher than for lower income taxpayers except at the very top of the income distribution. But with behavior included, the reduction in after-tax income for the top 1 percent of taxpayers is only 0.2 percent, much less than the 0.8 percent reduction for the entire population. The absolute average tax increase is also lower for the top 1 percent than for the next 4 percent, reflecting the high concentration of financial wealth among this group of taxpayers. Limiting the mortgage interest deduction only for taxpayers with marginal tax rates above 28 percent still mainly affects taxpayers in the top 5 percent of the income distribution, but their estimated tax increase is smaller than in the static simulation.

When behavioral responses are included, revenue-neutral mortgage credit options are slightly less generous than when no behavior is assumed. Eliminating the MID would finance an uncapped non-refundable credit of 19.2 percent of interest paid, a 100 percent capped non-refundable credit of interest paid up to $1,692, an uncapped refundable credit of 16.3 percent of interest, and a capped 100 percent refundable credit of interest paid up to $1,258 (table 3b). With the lower credits, low-income groups do not gain as much from replacing the MID with mortgage interest credits as in the static estimates. Still, lower income groups remain net winners from substituting credits, especially refundable credits, for the MID and high-income groups are worse off. Taxpayers in the fourth quintile of the income distribution continue to fare better with non-refundable than with refundable credits (table 4b).

The distributions by age and family type are also similar for the static and behavioral estimates. With behavior, eliminating the MID continues to reduce after-tax income by a larger percentage for married couples with children than for singles and those with no children and by a larger percentage for non-elderly than elderly taxpayers (table 5b). Replacing the mortgage interest deduction with mortgage credit options continues to lower after-tax incomes of married couples with children and raise after-tax incomes of married couples without children and singles (table 6b). It also continues to raise the after-tax incomes of taxpayers over age 65 and lower after-tax incomes for those under age 65.

### Effects of Reforming the Mortgage Interest Deduction by Race and Location

To explore potentially important disparities in the effects of alternatives to the mortgage interest deduction, data from the 2007 American Communities Survey (ACS) were used to impute the distribution of impacts across racial and ethnic groups and across several types of geographic locations. The TPC model classifies taxpayers based on their income, housing tenure, and mortgage status, but the underlying tax return data upon which the TPC model relies do not report taxpayers' race, ethnicity, or residential location. Therefore, for each category of taxpayer in the TPC model, ACS data were used to estimate the share of taxpayers in each of four racial/ethnic groups: non-Hispanic whites, non-Hispanic blacks, Hispanics, and Asians/others.[12] Similarly, for each category of taxpayer, ACS data were used to estimate the share living in metropolitan and non-metropolitan areas, and for those living in metropolitan areas, the share living in central cities or suburbs and the share living in each of the four census regions. Based on these ACS distributions (summarized in appendix tables A.1, A.2, and A.3) the TPC model results are stratified by taxpayers' racial/ethnic identity and geographic location.

[12] The ACS microdata are reported for households or individuals, not for tax units. For this analysis, tax units were created from ACS households using the family unit and subfamily variables. For households consisting of multiple families, we assumed that each family was a distinct taxpaying unit. In instances where more than one family was residing in an owner-occupied home, the head of household was designated the owner of the home. All other tax units in the household were then coded as renters.

### *Distributional Estimates by Race and Ethnicity*

Black and Hispanic taxpayers are much less likely than whites or Asians to benefit from the home mortgage deduction. On average, blacks and Hispanics have lower incomes, lower rates of homeownership, and lower house values than whites. Consequently, they are less likely to qualify for the home mortgage deduction, less likely to itemize, and less likely to realize substantial tax savings. Asians are only slightly less likely than whites to benefit from the home mortgage deduction.

Table 8a reports the results of our six tax policy alternatives, stratified by the imputed race or ethnicity of the taxpayer. Eliminating the home mortgage deduction altogether would increase taxes for 26.4 percent of whites and 22.8 percent of Asians, compared with only 14.0 percent of blacks and 14.5 percent of Hispanics. The disparate effect is largely due to differences in homeownership rates among these groups, as illustrated by table 9a, which presents the same results, but only for homeowners. But even among homeowners, a larger share of whites (44.0 percent) would see a tax increase than blacks (37.0 percent) or Hispanics (39.8 percent). Interestingly, after controlling for homeownership status, Asians would be even more likely than whites to pay higher taxes if the mortgage interest deduction were eliminated, with 52.9 percent seeing a tax increase.

The same racial and ethnic differences would apply under the second reform alternative—limiting the mortgage interest deduction to 28 percent for high-income taxpayers. Although this alternative would affect a much smaller share of taxpayers, whites and Asians are over three times more likely than blacks and about 2.5 times more likely than Hispanics to pay higher taxes. Again, differences across racial and ethnic groups persist even among homeowners.

Replacing the mortgage interest deduction with a non-refundable tax credit (the third and fourth reform alternatives considered here) would raise taxes for some while reducing taxes for others. Whites and Asians would be more likely than blacks or Hispanics to see a tax increase, but whites would also be the most likely to enjoy a tax cut under these alternatives. Under the third alternative, for example, 11.3 percent of whites and 10.9 percent of Asians would pay higher taxes, compared with only 5.2 percent of blacks and 5.9 percent of Hispanics. But a much larger share of whites (26.0 percent) would see a tax cut, compared with only 16.7 percent of blacks, 15.5 percent of Hispanics, and 18.9 percent of Asians. After controlling for homeownership status, racial/ethnic differences in the share with a tax cut essentially disappear, although whites and Asians are still more likely than blacks or Hispanics to see their taxes increase. Under both of these non-refundable tax credit options, the average tax liability among whites would remain essentially unchanged, while the average among blacks and Hispanics would fall and the average among Asians would increase.

A refundable tax credit would yield tax cuts for a larger share of households in every racial and ethnic group. Again, whites and Asians would be more likely than blacks or Hispanics to see a tax increase, and whites would also be the most likely to enjoy a tax cut. However, when we control for homeownership status, these alternatives yield tax cuts for a much larger share of black and Hispanic homeowners than for white or Asian homeowners. To illustrate, replacing the MID with a refundable capped credit gives 57.6 percent of white homeowners and 56.0 percent of Asian

homeowners a tax cut, compared with 69.5 percent of black homeowners and 69.0 percent of Hispanic homeowners. Both of the refundable tax credit alternatives would result in a small tax increase for the average white taxpayer, a considerably larger increase for the average Asian taxpayer, and tax cuts for the average black and Hispanic taxpayer

All of the differences across racial and ethnic groups persist under the assumption of a behavioral response to the tax policy changes. These results are reported in appendix tables 8b and 9b.

### *Distributional Estimates across Cities, Suburbs, and Non-metro Areas*

A larger share of the taxpayers who live in suburban metropolitan areas benefit from the home mortgage deduction than those living in central cities or non-metropolitan areas. On average, suburban taxpayers have higher incomes and are more likely to own their homes. And house values in suburban areas are higher (on average) than in either central cities or non-metropolitan communities.

Table 10a reports the results of our six tax policy alternatives, stratified by the type of community in which the taxpayer lives. Eliminating the home mortgage deduction altogether would increase taxes for 31.1 percent of suburban residents, compared with only 16.1 percent of central city taxpayers and 17.4 percent of non-metro taxpayers. The geographic distribution of tax changes is essentially the same under the second reform alternative—limiting the mortgage interest deduction to 28 percent for high-income taxpayers. The share of taxpayers affected by this change is much smaller, but the share of suburban residents paying higher taxes is over twice the share of central city residents and more than three times the share of non-metro residents.

If the mortgage interest deduction were replaced with a non-refundable tax credit (alternatives three and four) more taxpayers in all three types of communities would see a tax cut than a tax increase. Suburban taxpayers are the most likely to be affected one way or the other. For example, under the third alternative, 27.7 percent of suburban taxpayers would see a tax cut and 14.2 percent would pay higher taxes. Among central city taxpayers, only 15.8 percent would see a tax cut and 7.0 percent would pay more. And among those living in non-metro areas, 11.2 percent would pay less in taxes and 6.2 percent would pay more. Under these non-refundable tax credit options, the average tax liability would rise for suburban residents, while remaining essentially unchanged for central city taxpayers, and dropping for those living in non-metro communities.

A refundable tax credit (alternatives five and six) would yield tax cuts for a larger share of taxpayers in all types of communities. But under these scenarios, taxpayers living in non-metro areas would be most likely to see a tax reduction and their average tax liability would decline substantially. To illustrate, under alternative five, 37.2 percent of non-metro taxpayers would pay lower taxes, while only 7.1 percent would see taxes increase. On average, the tax liability among these taxpayers would drop $206. In contrast, 34.4 percent of suburban taxpayers would see a tax cut, 16.9 percent would see an increase, and the average tax liability would rise by $128. Finally, among central city

taxpayers, only 20.9 percent would enjoy a tax cut, 8.4 percent would see an increase, and the average liability would remain essentially unchanged.

All of the differences across types of communities persist under the assumption of a behavioral response to the tax policy changes. These results are reported in appendix table 10b.

### *Distributional Estimates across Metropolitan Areas by Region*

Table 11a reports the results of our six tax policy alternatives for taxpayers living in metropolitan areas, stratified by the geographic region of the county. The share of metropolitan taxpayers that benefit from the home mortgage deduction does not vary significantly across geographic regions. Eliminating the home mortgage deduction altogether would increase taxes for about a quarter of the taxpayers living in the metropolitan areas of all four regions of the country. However, average incomes and house values are higher in the metro areas of the Northeast and West than in the Midwest and South. Consequently, the size of the average tax increase caused by eliminating the mortgage deduction would vary from a high of $639 in the Northeast to a low of $604 in the South.

Similarly, capping the mortgage interest deduction at 28 percent for high-income taxpayers would affect roughly the same share of metro-area taxpayers living in all four regions (about 2 percent). Again, the biggest average increase in taxes would occur among those living in metro areas of the Northeast and the smallest among those living in the Midwest.

If the mortgage interest deduction were replaced with a non-refundable tax credit (alternatives three and four), the share of taxpayers with a tax cut would vary considerably by region, while the share with a tax increase would not. To illustrate, under alternative three, about 11 percent of metro-area taxpayers in all four regions would pay higher taxes. But the share paying lower taxes would range from a low of 21.3 percent in Northeast metros to 27.2 percent in Midwest metros. Correspondingly, the average federal tax change under this alternative would range from a *tax cut* of $26 among taxpayers in Midwest metros to a tax increase of $75 among those living in Northeast metros.

The same geographic pattern would result if the mortgage deduction was replaced by a refundable tax credit (alternatives five and six). Roughly the same share of metro-area taxpayers in all four regions would see a tax increase, but the share with a tax cut would be considerably higher in the Midwest and South than in the Northeast or West. As a consequence, the average metro-area taxpayer living in the Midwest would see a small reduction in total tax liability, while the average metro-area taxpayer in the Northeast would see a substantial increase.

All of these regional differences persist under the assumption of a behavioral response to the tax policy changes. These results are reported in appendix table 11b.

## CONCLUSIONS

The mortgage interest deduction is one of oldest and largest tax preferences in the federal income tax and the largest single federal subsidy for owner-occupied housing. Yet most scholars find it has little effect on homeownership levels. The deduction only benefits taxpayers who itemize deductions on their tax returns and provides a larger subsidy per dollar of interest to higher-income taxpayers because the value of the deduction rises with the tax rate. Because most of the subsidy goes to individuals who would likely own homes without the tax benefit, it has little effect on homeownership. More broadly based interest subsidies or credits for first-time home purchases could increase homeownership more, at the same or lower fiscal cost.

This study examines the distributional effects of the current mortgage interest deduction as well as a variety of proposals to modify the deduction. We used the Tax Policy Center micro-simulation model to estimate the effects of eliminating the deduction and of replacing it with four options estimated to produce the same budgetary cost: a 20 percent, non-refundable interest credit; a 17 percent, refundable interest credit; a non-refundable, 100 percent credit on the first $2,030 of mortgage interest; and a refundable, 100 percent credit on the first $1,490 of mortgage interest. All of these incentives would be available to itemizers and non-itemizers. We also simulate the effects of retaining the MID, but limiting the value of the deduction to 28 percent of interest paid, as proposed by the Obama administration in fiscal-year 2010 and 2011 budgets.

Eliminating the MID would reduce after-tax income more for high-income taxpayers than for lower income taxpayers. Those in the 80th to 99th percentiles of the income distribution would experience the largest proportional decrease in income. The very highest income taxpayers, however, would experience a relatively small loss in income because their mortgage costs as a share of income are lower than for other groups. In contrast, limiting the MID to 28 percent of interest paid would affect only the very highest income taxpayers who are now in the 33 or 35 percent rate brackets.

Replacing the MID with any of the four options examined would benefit taxpayers in the bottom four quintiles of the income distribution and hurt taxpayers in the top quintile. Taxpayers in the bottom three quintiles would benefit the most from the 100 percent capped refundable credit, while taxpayers in the fourth quintile would gain the most under the 100 percent non-refundable credit because they have enough liability to absorb the credit and would gain from the higher subsidy rate. High-income taxpayers would lose the most under the capped refundable credit and the least under the non-refundable, 20 percent matching subsidy.

We used data from the American Communities Survey to explore how the distributional effects estimated by the TPC model apply across racial and ethnic groups and different types of geographic locations. Eliminating the MID would raise taxes for a larger share of whites and Asians than for blacks and Hispanics. Limiting the value of the MID to 28 percent of interest would affect many fewer taxpayers in all ethnic groups, but would affect a much larger share of whites and Asians compared with blacks and Hispanics than totally eliminating the deduction.

Replacing the MID with either of the non-refundable credit options would raise average taxes among Asians, lower average taxes for blacks and Hispanics, and leave average taxes on whites about the same. The refundable credit options would on average raise taxes for both whites and Asians and lower taxes for blacks and Hispanics.

Eliminating the MID would raise taxes more for suburban residents than for those in central cities or outside metropolitan areas. Limiting the benefit of the deduction to 28 percent of interest would affect far fewer taxpayers than eliminating the MID, but those affected would be even more disproportionately concentrated among residents of suburbs. Replacing the MID with the non-refundable credit options would increase taxes for suburban residents, lower taxes for those outside metropolitan areas, and leave average taxes for central city residents about the same. The results would be similar for the refundable credit, except that those outside metropolitan areas would benefit even more than with a non-refundable credit

Eliminating the MID would affect approximately the same share of taxpayers in all regions of the country. Differences in average tax changes across regions would be modest, with residents of the Northeast paying on average the most additional tax and residents of the South the least. Capping the mortgage deduction at 28 percent of interest would also affect about the same share of taxpayers in all regions, with the average tax changes again largest in the Northeast, but now smallest in the Midwest. Replacing the MID with either a refundable or non-refundable credit would affect different numbers of metropolitan area taxpayers across regions. The share receiving a net tax cut would be highest in Midwest metro areas and lowest in metro areas of the Northeast; on average, taxpayers in metro areas in the Northeast would see their taxes rise by $75 while those in Midwest metro areas would see their taxes fall by $26.

In summary, replacing the MID with any of the credit options would benefit low- and middle-income groups, blacks and Hispanics, residents outside metropolitan areas, and, among metro residents, those living in the Midwest. Redistribution among groups would be larger with refundable than with non-refundable credits. The distributional effects largely reflect the fact that the mortgage interest deduction provides the largest benefit relative to a credit for taxpayers who itemize, face high marginal tax rates, and live in expensive homes.

## DATA TABLES

**Table 1: Impact on Individual Income Tax Liability and Revenue of Reforming the Mortgage Interest Deduction**

| | Calendar Year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2010-19** |
| **Calendar Year Liability-Static** | | | | | | | | | | | |
| Eliminate Mortgage Interest Deduction (1) | | | | | | | | | | | |
| Current Law | 90.0 | 100.1 | 107.8 | 114.3 | 122.1 | 129.9 | 137.6 | 145.7 | 153.9 | 162.8 | 1,264.2 |
| Current Policy Baseline (2) | 76.9 | 81.6 | 87.9 | 93.4 | 100.0 | 106.3 | 112.5 | 118.8 | 124.9 | 131.6 | 1,033.8 |
| Limit Mortgage Interest Deduction (3) | | | | | | | | | | | |
| Current Policy Baseline | 2.8 | 3.0 | 3.2 | 3.5 | 3.8 | 4.1 | 4.4 | 4.8 | 5.1 | 5.5 | 40.4 |
| **Calendar Year Liability-Behavioral Response (4)** | | | | | | | | | | | |
| Eliminate Mortgage Interest Deduction | | | | | | | | | | | |
| Current Law | 78.2 | 84.9 | 91.4 | 96.8 | 103.3 | 110.1 | 116.7 | 123.6 | 130.4 | 137.5 | 1,072.7 |
| Current Policy Baseline | 65.3 | 69.5 | 74.8 | 79.4 | 85.1 | 90.5 | 95.8 | 101.1 | 106.2 | 111.5 | 879.2 |
| Limit Mortgage Interest Deduction | | | | | | | | | | | |
| Current Policy Baseline | 2.6 | 2.9 | 3.0 | 3.3 | 3.6 | 3.9 | 4.2 | 4.5 | 4.8 | 5.2 | 38.0 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

(1) Proposal eliminates the home mortgage interest deduction. Fiscal year estimates assume a 40-60 fiscal split.

(2) The current policy baseline extends all of the individual income tax provisions included in 2001 EGTRRA and 2003 JGTRRA; maintains the estate tax at its 2009 parameters; extends the 2009 AMT Patch and indexes the AMT exemption, tax bracket thresholds, and phaseout thresholds.

(3) Proposal limits the tax saving from the mortgage interest deduction to 28 percent of interest paid in the top two rate brackets.

(4) Estimates include a behavioral response to the elimination of the mortgage interest deduction. Individuals are expected to sell assets that bear interest, dividends and capital gains to pay down their mortgages.

All proposals have an effective date of January 1, 2010.

**Table 2a: Distributional Effects of Eliminating or Scaling Back the Mortgage Interest Deduction by Income Group: Static Estimates**

| | | Income Percentiles | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ELIMINATE HOME MORTGAGE DEDUCTION** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 23.5 | 0.6 | 5.5 | 21.5 | 45.2 | 68.5 | 74.2 | 70.4 | 60.3 |
| Percentage change in after-tax income | -0.93% | -0.01% | -0.12% | -0.49% | -0.96% | -1.59% | -1.74% | -1.63% | -0.41% |
| Average federal tax change | 559 | 2 | 32 | 215 | 689 | 1,723 | 2,643 | 4,234 | 5,393 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | | | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.9 | 39.5 | 55.1 |
| Percentage change in after-tax income | -0.03% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | -0.15% | -0.09% |
| Average federal tax change | 20 | 0 | 0 | 0 | 0 | 0 | 4 | 385 | 1150 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 2b: Distributional Effects of Eliminating or Scaling Back the Mortgage Interest Deduction by Income Group with Behavioral Response**

| | | Income Percentiles | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ELIMINATE HOME MORTGAGE DEDUCTION** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| Percent with tax cut | 0.6 | 0.0 | 0.2 | 0.4 | 1.2 | 1.7 | 2.2 | 1.4 | 1.9 |
| Percent with tax increase | 22.1 | 0.6 | 5.4 | 21.0 | 43.4 | 62.4 | 66.9 | 59.4 | 37.9 |
| Percentage change in after-tax income | -0.79% | -0.01% | -0.12% | -0.48% | -0.91% | -1.46% | -1.51% | -1.23% | -0.20% |
| Average federal tax change | 476 | 2 | 31 | 209 | 652 | 1,588 | 2,294 | 3,185 | 2,576 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | | | | | | |
| Percent with tax cut | 1.0 | 0.0 | 0.2 | 0.8 | 1.9 | 4.1 | 3.2 | 1.1 | 0.4 |
| Percent with tax increase | 1.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 1.4 | 39.3 | 53.1 |
| Percentage change in after-tax income | -0.03% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | -0.15% | -0.09% |
| Average federal tax change | 19 | 0 | 0 | -1 | -2 | -3 | -1 | 382 | 1,107 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 3a: Distributional Effects by Income Group of Replacing the Mortgage Interest Deduction with a Mortgage Interest Credit: Static Estimates**

| REPLACE MORTGAGE DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID | All Units | 0-20 | 20-40 | 40-60 | 60-80 | 80-90 | 90-95 | 95-99 | Top 1 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Income Percentiles | | | | | |
| Percent with tax cut | 21.4 | 2.9 | 16.9 | 36.2 | 43.5 | 24.5 | 8.4 | 3.0 | 2.9 |
| Percent with tax increase | 12.0 | 0.0 | 0.8 | 5.3 | 15.0 | 44.6 | 66.3 | 67.4 | 57.5 |
| Percentage change in after-tax income | 0.00% | 0.04% | 0.22% | 0.39% | 0.36% | -0.10% | -0.40% | -0.61% | -0.15% |
| Average federal tax change | -1 | -5 | -58 | -169 | -257 | 106 | 604 | 1,583 | 1,907 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | Income Percentiles | | | | | |
| Percent with tax cut | 23.4 | 2.9 | 16.9 | 36.9 | 45.7 | 32.6 | 23.9 | 12.6 | 10.4 |
| Percent with tax increase | 10.0 | 0.0 | 0.9 | 4.7 | 13.1 | 36.5 | 50.9 | 57.9 | 50.1 |
| Percentage change in after-tax income | 0.00% | 0.09% | 0.55% | 0.93% | 0.56% | -0.33% | -0.77% | -1.09% | -0.32% |
| Average federal tax change | 0 | -9 | -141 | -408 | -405 | 354 | 1,163 | 2,840 | 4,211 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTGAGE DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | Income Percentiles | | | | | |
| Percent with tax cut | 31.1 | 19.4 | 33.6 | 46.4 | 44.3 | 18.9 | 6.5 | 2.8 | 2.9 |
| Percent with tax increase | 12.1 | 0.0 | 0.0 | 3.5 | 15.5 | 50.7 | 68.5 | 68.0 | 57.8 |
| Percentage change in after-tax income | 0.00% | 0.59% | 0.62% | 0.56% | 0.25% | -0.30% | -0.59% | -0.75% | -0.18% |
| Average federal tax change | 0 | -65 | -161 | -246 | -182 | 324 | 894 | 1,957 | 2,404 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | Income Percentiles | | | | | |
| Percent with tax cut | 32.1 | 21.6 | 34.3 | 45.6 | 40.8 | 23.9 | 16.6 | 9.6 | 8.5 |
| Percent with tax increase | 12.0 | 0.0 | 0.3 | 4.6 | 19.0 | 45.7 | 58.4 | 61.3 | 52.1 |
| Percentage change in after-tax income | 0.00% | 1.49% | 1.35% | 1.02% | 0.23% | -0.65% | -1.02% | -1.23% | -0.35% |
| Average federal tax change | 0 | -165 | -349 | -444 | -166 | 702 | 1,545 | 3,200 | 4,512 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 3b: Distributional Effects by Income Group of Replacing the Mortgage Interest Deduction with a Mortgage Interest Credit with Behavioral Response**

| REPLACE MORTGAGE DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID | All Units | 0-20 | 20-40 | 40-60 | 60-80 | 80-90 | 90-95 | 95-99 | Top 1 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Income Percentiles | | | | |
| Percent with tax cut | 21.4 | 2.9 | 16.9 | 35.9 | 43.4 | 24.3 | 9.6 | 4.0 | 3.4 |
| Percent with tax increase | 11.1 | 0.0 | 0.8 | 5.4 | 14.6 | 43.2 | 60.2 | 57.4 | 37.4 |
| Percentage change in after-tax income | 0.00% | 0.04% | 0.22% | 0.36% | 0.32% | -0.13% | -0.40% | -0.54% | -0.09% |
| Average federal tax change | -1 | -5 | -56 | -157 | -228 | 140 | 608 | 1,411 | 1,235 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | | Income Percentiles | | | | |
| Percent with tax cut | 23.1 | 2.9 | 16.9 | 36.0 | 42.7 | 29.9 | 26.3 | 22.6 | 30.1 |
| Percent with tax increase | 10.4 | 0.0 | 1.0 | 5.7 | 16.0 | 39.3 | 48.4 | 47.9 | 30.3 |
| Percentage change in after-tax income | 0.00% | 0.09% | 0.51% | 0.78% | 0.38% | -0.41% | -0.71% | -0.80% | -0.13% |
| Average federal tax change | 0 | -10 | -132 | -340 | -276 | 446 | 1,081 | 2,082 | 1,707 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTGAGE DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | | Income Percentiles | | | | |
| Percent with tax cut | 31.0 | 19.2 | 33.3 | 46.1 | 44.2 | 19.2 | 7.9 | 3.7 | 3.4 |
| Percent with tax increase | 11.2 | 0.0 | 0.0 | 3.6 | 15.0 | 48.7 | 62.2 | 58.1 | 37.6 |
| Percentage change in after-tax income | 0.00% | 0.56% | 0.59% | 0.52% | 0.21% | -0.32% | -0.58% | -0.66% | -0.12% |
| Average federal tax change | 0 | -62 | -152 | -225 | -150 | 350 | 875 | 1,724 | 1,522 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |
| **REPLACE MORTAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,258** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| | | | | | Income Percentiles | | | | |
| Percent with tax cut | 32.0 | 21.6 | 34.1 | 44.2 | 38.4 | 23.4 | 21.7 | 19.9 | 28.4 |
| Percent with tax increase | 12.1 | 0.0 | 0.6 | 6.0 | 21.4 | 46.2 | 53.3 | 50.9 | 32.2 |
| Percentage change in after-tax income | 0.00% | 1.34% | 1.17% | 0.82% | 0.11% | -0.67% | -0.91% | -0.91% | -0.15% |
| Average federal tax change | -1 | -148 | -303 | -360 | -76 | 729 | 1,386 | 2,360 | 1,924 |
| Average after-tax income (baseline) | 60,371 | 11,067 | 25,893 | 43,678 | 71,839 | 108,418 | 151,680 | 259,935 | 1,302,188 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 4a: Distributional Effects by Income Group of Options for Reforming Mortgage Interest Subsidies: Static Options**

| | | Income Percentiles | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SUMMARY: CHANGE IN AFTER-TAX INCOME** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| Replace MID with non-refundable 20.0% credit | 0.00% | 0.04% | 0.22% | 0.39% | 0.36% | -0.10% | -0.40% | -0.61% | -0.15% |
| Replace MID with non-refundable $2,030 credit | 0.00% | 0.09% | 0.55% | 0.93% | 0.56% | -0.33% | -0.77% | -1.09% | -0.32% |
| Replace MID with refundable 17.1% credit | 0.00% | 0.59% | 0.62% | 0.56% | 0.25% | -0.30% | -0.59% | -0.75% | -0.18% |
| Replace MID with refundable $1490 credit | 0.00% | 1.49% | 1.35% | 1.02% | 0.23% | -0.65% | -1.02% | -1.23% | -0.35% |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 4b: Distributional Effects by Income Group of Options for Reforming Mortgage Interest Subsidies with Behavioral Response**

| | | Income Percentiles | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SUMMARY: CHANGE IN AFTER-TAX INCOME** | **All Units** | **0-20** | **20-40** | **40-60** | **60-80** | **80-90** | **90-95** | **95-99** | **Top 1** |
| Replace MID with non-refundable 19.2% credit | 0.00% | 0.04% | 0.22% | 0.36% | 0.32% | -0.13% | -0.40% | -0.54% | -0.09% |
| Replace MID with non-refundable $1,692 credit | 0.00% | 0.09% | 0.51% | 0.78% | 0.38% | -0.41% | -0.71% | -0.80% | -0.13% |
| Replace MID with refundable 16.3% credit | 0.00% | 0.56% | 0.59% | 0.52% | 0.21% | -0.32% | -0.58% | -0.66% | -0.12% |
| Replace MID with refundable $1258 credit | 0.00% | 1.34% | 1.17% | 0.82% | 0.11% | -0.67% | -0.91% | -0.91% | -0.15% |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 5a: Distributional Effects of Eliminating or Scaling Back the Mortgage Interest Deduction by Family Type and Age: Static Estimates**

| ELIMINATE HOME MORTGAGE DEDUCTION | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Percent with tax increase | 23.5 | 28.7 | 50.4 | 13.2 | 14.3 | 10.2 | 26.8 |
| Percentage change in after-tax income | -0.93% | -0.73% | -1.39% | -0.69% | -0.69% | -0.29% | -1.09% |
| Average federal tax change | 559 | 667 | 1,464 | 241 | 250 | 183 | 649 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 1.6 | 2.5 | 4.6 | 0.4 | 0.3 | 0.9 | 1.8 |
| Percentage change in after-tax income | -0.03% | -0.03% | -0.06% | -0.01% | -0.01% | -0.01% | -0.04% |
| Average federal tax change | 20 | 29 | 62 | 5 | 3 | 9 | 23 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 5b: Distributional Effects of Eliminating or Scaling Back the Mortgage Interest Deduction by Family Type and Age with Behavioral Responses**

| ELIMINATE HOME MORTGAGE DEDUCTION | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Percent with tax cut | 0.6 | 1.0 | 0.6 | 0.4 | 0.2 | 1.2 | 0.4 |
| Percent with tax increase | 22.1 | 25.8 | 48.4 | 12.3 | 14.1 | 8.0 | 25.5 |
| Percentage change in after-tax income | -0.79% | -0.58% | -1.20% | -0.60% | -0.65% | -0.18% | -0.94% |
| Average federal tax change | 476 | 533 | 1,265 | 209 | 232 | 115 | 562 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | | | | |
| Percent with tax cut | 1.0 | 0.5 | 1.8 | 0.4 | 0.6 | 1.1 | 1.0 |
| Percent with tax increase | 1.7 | 0.5 | 0.4 | 0.3 | 2.3 | 0.9 | 1.8 |
| Percentage change in after-tax income | -0.03% | -0.01% | -0.04% | -0.01% | -0.03% | -0.01% | -0.04% |
| Average federal tax change | 19 | 4 | 42 | 3 | 21 | 6 | 22 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 6a: Distributional Effects by Family Type and Age of Replacing the Mortgage Interest Deduction with a Mortgage Interest Credit: Static Estimates**

| REPLACE MORTGAGE DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Percent with tax cut | 21.4 | 29.9 | 30.6 | 15.4 | 15.6 | 17.3 | 22.4 |
| Percent with tax increase | 12.0 | 13.6 | 27.4 | 6.7 | 6.2 | 4.2 | 13.8 |
| Percentage change in after-tax income | 0.00% | 0.06% | -0.11% | 0.03% | 0.09% | 0.08% | -0.02% |
| Average federal tax change | -1 | -56 | 117 | -10 | -33 | -48 | 11 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 23.4 | 32.7 | 31.0 | 18.1 | 15.8 | 18.8 | 24.5 |
| Percent with tax increase | 10.0 | 11.0 | 27.1 | 4.1 | 6.0 | 2.8 | 11.8 |
| Percentage change in after-tax income | 0.00% | 0.09% | -0.39% | 0.29% | 0.21% | 0.18% | -0.05% |
| Average federal tax change | 0 | -83 | 413 | -99 | -75 | -114 | 27 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTGAGE DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 31.1 | 41.9 | 44.7 | 20.4 | 31.4 | 29.2 | 31.6 |
| Percent with tax increase | 12.1 | 14.9 | 25.8 | 7.4 | 4.7 | 4.6 | 13.8 |
| Percentage change in after-tax income | 0.00% | 0.03% | -0.10% | 0.00% | 0.29% | 0.08% | -0.02% |
| Average federal tax change | 0 | -25 | 109 | 0 | -106 | -53 | 13 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 32.1 | 43.7 | 40.7 | 23.5 | 30.7 | 32.8 | 32.0 |
| Percent with tax increase | 12.0 | 14.2 | 29.9 | 5.7 | 5.6 | 3.7 | 13.9 |
| Percentage change in after-tax income | 0.00% | 0.06% | -0.42% | 0.23% | 0.61% | 0.26% | -0.07% |
| Average federal tax change | 0 | -58 | 444 | -82 | -221 | -163 | 39 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 6b: Distributional Effects by Family Type and Age of Replacing the Mortgage Interest Deduction with a Mortgage Interest Credit with Behavioral Responses**

| REPLACE MORTGAGE DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Percent with tax cut | 21.4 | 30.0 | 30.4 | 15.4 | 15.5 | 17.8 | 22.3 |
| Percent with tax increase | 11.1 | 11.8 | 26.4 | 6.3 | 6.3 | 2.8 | 13.2 |
| Percentage change in after-tax income | 0.00% | 0.07% | -0.11% | 0.02% | 0.08% | 0.09% | -0.02% |
| Average federal tax change | -1 | -62 | 118 | -8 | -28 | -57 | 13 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 23.1 | 32.7 | 30.4 | 17.7 | 15.5 | 19.3 | 24.0 |
| Percent with tax increase | 10.4 | 11.0 | 27.8 | 4.5 | 6.4 | 2.3 | 12.4 |
| Percentage change in after-tax income | 0.00% | 0.09% | -0.37% | 0.25% | 0.14% | 0.23% | -0.06% |
| Average federal tax change | 0 | -104 | 386 | -86 | -50 | -141 | 34 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTGAGE DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 31.0 | 41.8 | 44.5 | 20.4 | 31.3 | 29.4 | 31.4 |
| Percent with tax increase | 11.2 | 13.0 | 24.7 | 6.9 | 4.6 | 3.1 | 13.1 |
| Percentage change in after-tax income | 0.00% | 0.04% | -0.10% | 0.00% | 0.26% | 0.10% | -0.03% |
| Average federal tax change | 0 | -36 | 110 | 1 | -94 | -66 | 16 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |
| **REPLACE MORTAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,258** | **All Units** | **Married No Kids** | **Married with kids** | **Single No kids** | **Single with kids** | **Elderly** | **Non-Elderly** |
| Percent with tax cut | 32.0 | 44.2 | 40.4 | 23.3 | 30.2 | 33.4 | 31.6 |
| Percent with tax increase | 12.1 | 13.7 | 30.1 | 6.0 | 6.2 | 3.1 | 14.3 |
| Percentage change in after-tax income | 0.00% | 0.09% | -0.39% | 0.20% | 0.49% | 0.29% | -0.07% |
| Average federal tax change | -1 | -83 | 407 | -71 | -175 | -184 | 42 |
| Average after-tax income (baseline) | 60,371 | 91,140 | 105,307 | 34,797 | 35,958 | 62,727 | 59,803 |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 7a: Distributional Effects by Family Type of Options for Reforming Mortgage Interest Subsidies: Static Options**

| SUMMARY: CHANGE IN AFTER-TAX INCOME | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Replace MID with non-refundable 20.0% credit | 0.00% | 0.06% | -0.11% | 0.03% | 0.09% | 0.08% | -0.02% |
| Replace MID with non-refundable $2,030 credit | 0.00% | 0.09% | -0.39% | 0.29% | 0.21% | 0.18% | -0.05% |
| Replace MID with refundable 17.1% credit | 0.00% | 0.03% | -0.10% | 0.00% | 0.29% | 0.08% | -0.02% |
| Replace MID with refundable $1490 credit | 0.00% | 0.06% | -0.42% | 0.23% | 0.61% | 0.26% | -0.07% |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 7b: Distributional Effects by Family Type of Options for Reforming Mortgage Interest Subsidies with Behavioral Response**

| SUMMARY: CHANGE IN AFTER-TAX INCOME | All Units | Married No Kids | Married with kids | Single No kids | Single with kids | Elderly | Non-Elderly |
|---|---|---|---|---|---|---|---|
| Replace MID with non-refundable 19.2% credit | 0.00% | 0.07% | -0.11% | 0.02% | 0.08% | 0.09% | -0.02% |
| Replace MID with non-refundable $1,692 credit | 0.00% | 0.09% | -0.37% | 0.25% | 0.14% | 0.23% | -0.06% |
| Replace MID with refundable 16.3% credit | 0.00% | 0.04% | -0.10% | 0.00% | 0.26% | 0.10% | -0.03% |
| Replace MID with refundable $1,258 credit | 0.00% | 0.09% | -0.39% | 0.20% | 0.49% | 0.29% | -0.07% |

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0509-4).

**Table 8a: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Race and Ethnicity**

| 1. ELIMINATE HOME MORTGAGE DEDUCTION | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian/Other |
|---|---|---|---|---|
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 26.4 | 14.0 | 14.5 | 22.8 |
| Percentage change in after-tax income | -0.96% | -0.72% | -0.73% | -0.90% |
| Average federal tax change | 632 | 277 | 302 | 613 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 1.9 | 0.6 | 0.7 | 2.0 |
| Percentage change in after-tax income | -0.04% | -0.02% | -0.02% | -0.04% |
| Average federal tax change | 23 | 7 | 9 | 25 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | | | | |
| Percent with tax cut | 26.0 | 16.7 | 15.5 | 18.9 |
| Percent with tax increase | 11.3 | 5.2 | 5.9 | 10.9 |
| Percentage change in after-tax income | -0.01% | 0.17% | 0.09% | -0.14% |
| Average federal tax change | 6 | -67 | -37 | 95 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 23.7 | 15.6 | 14.6 | 16.7 |
| Percent with tax increase | 13.5 | 6.3 | 6.7 | 13.1 |
| Percentage change in after-tax income | 0.00% | 0.07% | 0.05% | -0.07% |
| Average federal tax change | 2 | -28 | -20 | 46 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 34.2 | 25.6 | 25.8 | 24.5 |
| Percent with tax increase | 13.6 | 6.2 | 6.7 | 12.9 |
| Percentage change in after-tax income | -0.03% | 0.28% | 0.26% | -0.18% |
| Average federal tax change | 21 | -107 | -105 | 122 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 33.7 | 25.1 | 25.8 | 23.8 |
| Percent with tax increase | 13.8 | 6.3 | 6.3 | 13.4 |
| Percentage change in after-tax income | -0.02% | 0.13% | 0.15% | -0.10% |
| Average federal tax change | 10 | -48 | -62 | 65 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 8b: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Race and Ethnicity, with Behavior Responses**

| 1. ELIMINATE HOME MORTGAGE DEDUCTION | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian/Other |
|---|---|---|---|---|
| Percent with tax cut | 0.6 | 0.4 | 0.3 | 0.5 |
| Percent with tax increase | 24.7 | 13.4 | 13.8 | 21.4 |
| Percentage change in after-tax income | -0.81% | -0.63% | -0.64% | -0.76% |
| Average federal tax change | 537 | 242 | 265 | 519 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 1.1 | 0.6 | 0.6 | 0.9 |
| Percent with tax increase | 2.1 | 0.7 | 0.8 | 2.2 |
| Percentage change in after-tax income | -0.03% | -0.02% | -0.02% | -0.03% |
| Average federal tax change | 22 | 7 | 8 | 23 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | | | | |
| Percent with tax cut | 25.6 | 16.4 | 15.1 | 18.7 |
| Percent with tax increase | 11.7 | 5.6 | 6.2 | 11.1 |
| Percentage change in after-tax income | -0.01% | 0.14% | 0.06% | -0.12% |
| Average federal tax change | 4 | -54 | -26 | 81 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 23.7 | 15.6 | 14.5 | 16.7 |
| Percent with tax increase | 12.5 | 6.0 | 6.4 | 12.2 |
| Percentage change in after-tax income | 0.00% | 0.06% | 0.04% | -0.06% |
| Average federal tax change | 2 | -25 | -17 | 44 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 34.1 | 25.3 | 25.5 | 24.6 |
| Percent with tax increase | 13.7 | 6.5 | 7.0 | 12.8 |
| Percentage change in after-tax income | -0.02% | 0.23% | 0.21% | -0.15% |
| Average federal tax change | 15 | -89 | -85 | 101 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 33.6 | 25.1 | 25.7 | 23.8 |
| Percent with tax increase | 12.8 | 5.9 | 6.0 | 12.4 |
| Percentage change in after-tax income | -0.01% | 0.11% | 0.14% | -0.09% |
| Average federal tax change | 9 | -44 | -56 | 61 |
| Average after-tax income (baseline) | 66,113 | 38,661 | 41,129 | 68,121 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 9a: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Race and Ethnicity, Homeowners Only**

| 1. ELIMINATE HOME MORTGAGE DEDUCTION | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian/Other |
|---|---|---|---|---|
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 44.0 | 37.0 | 39.8 | 52.9 |
| Percentage change in after-tax income | -1.28% | -1.32% | -1.35% | -1.48% |
| Average federal tax change | 1054 | 727 | 837 | 1428 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 3.2 | 1.6 | 2.0 | 4.6 |
| Percentage change in after-tax income | -0.05% | -0.03% | -0.04% | -0.06% |
| Average federal tax change | 39 | 19 | 25 | 57 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | | | | |
| Percent with tax cut | 43.4 | 44.4 | 41.8 | 43.3 |
| Percent with tax increase | 18.8 | 13.7 | 16.3 | 25.4 |
| Percentage change in after-tax income | -0.01% | 0.33% | 0.15% | -0.24% |
| Average federal tax change | 9 | -181 | -93 | 229 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 39.7 | 41.4 | 39.2 | 38.2 |
| Percent with tax increase | 22.4 | 16.6 | 18.7 | 30.4 |
| Percentage change in after-tax income | 0.00% | 0.13% | 0.08% | -0.11% |
| Average federal tax change | 3 | -74 | -52 | 111 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 57.6 | 69.5 | 69.0 | 56.0 |
| Percent with tax increase | 22.5 | 16.3 | 18.4 | 30.0 |
| Percentage change in after-tax income | -0.04% | 0.53% | 0.43% | -0.31% |
| Average federal tax change | 34 | -293 | -270 | 296 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 57.4 | 69.5 | 70.0 | 55.1 |
| Percent with tax increase | 22.8 | 16.3 | 17.5 | 31.0 |
| Percentage change in after-tax income | -0.02% | 0.24% | 0.26% | -0.16% |
| Average federal tax change | 17 | -131 | -163 | 157 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 9b: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Race and Ethnicity, Homeowners Only, with Behavior Responses**

| **1. ELIMINATE HOME MORTGAGE DEDUCTION** | **Non-Hispanic White** | **Non-Hispanic Black** | **Hispanic** | **Asian/Other** |
|---|---|---|---|---|
| Percent with tax cut | 1.2 | 1.1 | 0.9 | 1.3 |
| Percent with tax increase | 41.2 | 35.0 | 38.0 | 49.5 |
| Percentage change in after-tax income | -1.08% | -1.15% | -1.18% | -1.25% |
| Average federal tax change | 895 | 636 | 733 | 1207 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 3.2 | 2.6 | 2.8 | 3.7 |
| Percent with tax increase | 3.5 | 1.9 | 2.3 | 5.1 |
| Percentage change in after-tax income | -0.04% | -0.03% | -0.04% | -0.06% |
| Average federal tax change | 36 | 17 | 23 | 54 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | | | | |
| Percent with tax cut | 42.8 | 43.5 | 40.8 | 42.8 |
| Percent with tax increase | 19.5 | 14.7 | 17.4 | 25.9 |
| Percentage change in after-tax income | -0.01% | 0.27% | 0.10% | -0.20% |
| Average federal tax change | 6 | -147 | -64 | 195 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 39.7 | 41.4 | 39.2 | 38.3 |
| Percent with tax increase | 20.9 | 15.7 | 17.9 | 28.4 |
| Percentage change in after-tax income | 0.00% | 0.12% | 0.07% | -0.11% |
| Average federal tax change | 3 | -66 | -45 | 105 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 57.4 | 68.7 | 68.2 | 56.3 |
| Percent with tax increase | 22.7 | 17.1 | 19.2 | 29.8 |
| Percentage change in after-tax income | -0.03% | 0.44% | 0.35% | -0.25% |
| Average federal tax change | 24 | -243 | -216 | 246 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 57.5 | 69.6 | 69.9 | 55.3 |
| Percent with tax increase | 21.0 | 15.2 | 16.5 | 28.7 |
| Percentage change in after-tax income | -0.02% | 0.22% | 0.24% | -0.15% |
| Average federal tax change | 15 | -119 | -148 | 146 |
| Average after-tax income (baseline) | 82,578 | 55,240 | 62,105 | 96,522 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 10a: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction, by Taxpayer Metropolitan Area Status**

| 1. ELIMINATE HOME MORTGAGE DEDUCTION | Non-Metropolitan Areas | Metropolitan Areas | Metropolitan Areas-Central City | Metropolitan Areas-Suburban |
|---|---|---|---|---|
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 17.4 | 25.0 | 16.1 | 31.1 |
| Percentage change in after-tax income | -0.71% | -0.96% | -0.71% | -1.08% |
| Average federal tax change | 324 | 617 | 391 | 798 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 0.7 | 1.9 | 1.2 | 2.5 |
| Percentage change in after-tax income | -0.02% | -0.04% | -0.03% | -0.04% |
| Average federal tax change | 9 | 23 | 14 | 31 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | | | | |
| Percent with tax cut | 22.2 | 23.7 | 15.8 | 27.7 |
| Percent with tax increase | 6.2 | 11.0 | 7.0 | 14.2 |
| Percentage change in after-tax income | 0.24% | -0.04% | -0.02% | -0.10% |
| Average federal tax change | -111 | 29 | 10 | 76 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 21.4 | 21.3 | 13.9 | 24.9 |
| Percent with tax increase | 6.8 | 13.3 | 8.8 | 16.9 |
| Percentage change in after-tax income | 0.14% | -0.02% | -0.03% | -0.05% |
| Average federal tax change | -62 | 16 | 14 | 36 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 37.2 | 30.6 | 20.9 | 34.4 |
| Percent with tax increase | 7.1 | 13.2 | 8.4 | 16.9 |
| Percentage change in after-tax income | 0.45% | -0.08% | -0.04% | -0.17% |
| Average federal tax change | -206 | 54 | 21 | 128 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 37.9 | 30.3 | 20.3 | 34.0 |
| Percent with tax increase | 6.3 | 13.5 | 9.0 | 17.3 |
| Percentage change in after-tax income | 0.26% | -0.05% | -0.04% | -0.09% |
| Average federal tax change | -117 | 31 | 22 | 67 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 10b: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction, by Taxpayer Metropolitan Area Status, with Behavior Responses**

| | Non-Metropolitan Areas | Metropolitan Areas | Metropolitan Areas-Central City | Metropolitan Areas-Suburban |
|---|---|---|---|---|
| **1. ELIMINATE HOME MORTGAGE DEDUCTION** | | | | |
| Percent with tax cut | 0.4 | 0.7 | 0.5 | 0.8 |
| Percent with tax increase | 16.5 | 23.4 | 15.0 | 29.1 |
| Percentage change in after-tax income | -0.62% | -0.81% | -0.60% | -0.91% |
| Average federal tax change | 283 | 523 | 330 | 676 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 1.3 | 1.8 | 1.1 | 2.2 |
| Percent with tax increase | 0.9 | 2.1 | 1.3 | 2.8 |
| Percentage change in after-tax income | -0.02% | -0.03% | -0.02% | -0.04% |
| Average federal tax change | 8 | 22 | 13 | 29 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | | | | |
| Percent with tax cut | 21.8 | 23.3 | 15.6 | 27.3 |
| Percent with tax increase | 6.6 | 11.4 | 7.2 | 14.6 |
| Percentage change in after-tax income | 0.20% | -0.04% | -0.01% | -0.09% |
| Average federal tax change | -93 | 24 | 5 | 65 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 21.4 | 21.4 | 13.9 | 24.9 |
| Percent with tax increase | 6.4 | 11.4 | 8.2 | 15.8 |
| Percentage change in after-tax income | 0.13% | -0.02% | -0.02% | -0.05% |
| Average federal tax change | -58 | 15 | 13 | 35 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 55.7 | 30.5 | 20.9 | 34.4 |
| Percent with tax increase | 7.5 | 13.2 | 8.4 | 16.9 |
| Percentage change in after-tax income | 0.38% | -0.07% | -0.02% | -0.14% |
| Average federal tax change | -174 | 44 | 14 | 106 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 37.9 | 30.4 | 20.3 | 434.1 |
| Percent with tax increase | 5.9 | 12.5 | 8.3 | 16.0 |
| Percentage change in after-tax income | 0.24% | -0.04% | -0.04% | -0.08% |
| Average federal tax change | -109 | 29 | 20 | 63 |
| Average after-tax income (baseline) | 45,676 | 64,598 | 55,215 | 74,135 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 11a: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Metropolitan Status and Geographic Region**

| | Metropolitan Areas in the Northeast Region | Metropolitan Areas in the Midwest Region | Metropolitan Areas in the West Region | Metropolitan Areas in the South Region |
|---|---|---|---|---|
| **1. ELIMINATE HOME MORTGAGE DEDUCTION** | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 24.4 | 26.7 | 24.5 | 25.0 |
| Percentage change in after-tax income | -0.91% | -1.03% | -0.93% | -0.97% |
| Average federal tax change | 639 | 612 | 619 | 604 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 0.0 | 0.0 | 0.0 | 0.0 |
| Percent with tax increase | 2.0 | 1.7 | 1.9 | 1.8 |
| Percentage change in after-tax income | -0.04% | -0.04% | -0.04% | -0.04% |
| Average federal tax change | 25 | 21 | 24 | 22 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $2,030** | | | | |
| Percent with tax cut | 21.3 | 27.2 | 22.3 | 24.4 |
| Percent with tax increase | 11.3 | 11.1 | 11.0 | 10.8 |
| Percentage change in after-tax income | -0.11% | 0.04% | -0.07% | -0.02% |
| Average federal tax change | 75 | -26 | 49 | 12 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 20.0 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 19.0 | 25.3 | 19.7 | 22.1 |
| Percent with tax increase | 13.6 | 12.9 | 13.5 | 13.0 |
| Percentage change in after-tax income | -0.05% | 0.03% | -0.04% | -0.01% |
| Average federal tax change | 37 | -16 | 29 | 8 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 26.1 | 36.1 | 28.0 | 32.6 |
| Percent with tax increase | 13.5 | 13.2 | 13.2 | 12.9 |
| Percentage change in after-tax income | -0.17% | 0.03% | -0.13% | -0.04% |
| Average federal tax change | 120 | -18 | 87 | 24 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 17.1 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 27.1 | 36.3 | 27.3 | 32.3 |
| Percent with tax increase | 13.9 | 12.9 | 13.9 | 13.2 |
| Percentage change in after-tax income | -0.09% | 0.03% | -0.08% | -0.03% |
| Average federal tax change | 65 | -15 | 53 | 16 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

**Table 11b: Distributional Effects of Eliminating, Scaling Back, or Reforming the Mortgage Interest Deduction by Taxpayer Metropolitan Status and Geographic Region, with Behavior Response**

| 1. ELIMINATE HOME MORTGAGE DEDUCTION | Metropolitan Areas in the Northeast | Metropolitan Areas in the Midwest | Metropolitan Areas in the West Region | Metropolitan Areas in the South Region |
|---|---|---|---|---|
| Percent with tax cut | 0.6 | 0.6 | 0.7 | 0.7 |
| Percent with tax increase | 22.9 | 25.2 | 22.8 | 23.5 |
| Percentage change in after-tax income | -0.77% | -0.88% | -0.79% | -0.82% |
| Average federal tax change | 541 | 526 | 521 | 513 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **2. LIMIT MORTGAGE INTEREST DEDUCTION FOR HIGH-INCOME TAXPAYERS TO 28 PERCENT** | | | | |
| Percent with tax cut | 1.7 | 1.9 | 1.7 | 1.8 |
| Percent with tax increase | 2.2 | 1.9 | 2.2 | 2.0 |
| Percentage change in after-tax income | -0.03% | -0.03% | -0.03% | -0.03% |
| Average federal tax change | 24 | 20 | 22 | 21 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **3. REPLACE MORTGAGE DEDUCTION WITH 100% NON-REFUNDABLE CREDIT UP TO $1,692** | | | | |
| Percent with tax cut | 21.0 | 26.7 | 22.0 | 24.1 |
| Percent with tax increase | 11.6 | 11.6 | 11.3 | 11.2 |
| Percentage change in after-tax income | -0.09% | 0.03% | -0.06% | -0.02% |
| Average federal tax change | 64 | -18 | 39 | 10 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **4. REPLACE MORTGAGE INTEREST DEDUCTION WITH NON-REFUNDABLE CREDIT EQUAL TO 19.2 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 19.0 | 25.2 | 19.8 | 22.2 |
| Percent with tax increase | 12.6 | 12.1 | 12.5 | 12.1 |
| Percentage change in after-tax income | -0.05% | 0.02% | -0.04% | -0.01% |
| Average federal tax change | 36 | -14 | 27 | 8 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **5. REPLACE MORTGAGE DEDUCTION WITH 100% REFUNDABLE CREDIT UP TO $1,490** | | | | |
| Percent with tax cut | 26.2 | 35.8 | 28.0 | 32.6 |
| Percent with tax increase | 13.5 | 13.5 | 13.2 | 13.0 |
| Percentage change in after-tax income | -0.14% | 0.02% | -0.10% | -0.03% |
| Average federal tax change | 100 | -12 | 69 | 18 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |
| **6. REPLACE MORTGAGE INTEREST DEDUCTION WITH REFUNDABLE CREDIT EQUAL TO 16.3 PERCENT OF INTEREST PAID** | | | | |
| Percent with tax cut | 26 | 36 | 27 | 32 |
| Percent with tax increase | 13 | 12 | 13 | 12 |
| Percentage change in after-tax income | -0.09% | 0.02% | -0.07% | -0.02% |
| Average federal tax change | 61 | -13 | 48 | 15 |
| Average after-tax income (baseline) | 70,100 | 59,476 | 66,308 | 62,482 |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

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## APPENDIX A1 – A3

***Table A.1: Racial Distribution Across Income Decile and Tenure***

| | Homeowners with an Active Mortgage | | | | Homeowners without an Active Motgage | | | | Renters | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Income Decile: | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian-Other | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian-Other | Non-Hispanic White | Non-Hispanic Black | Hispanic | Asian-Other |
| 0-10% | 70% | 13% | 12% | 6% | 78% | 10% | 7% | 5% | 59% | 16% | 19% | 6% |
| 10-20% | 72% | 11% | 12% | 5% | 84% | 7% | 6% | 3% | 57% | 20% | 16% | 7% |
| 20-30% | 74% | 10% | 11% | 4% | 86% | 6% | 5% | 3% | 61% | 16% | 17% | 6% |
| 30-40% | 76% | 9% | 10% | 4% | 87% | 5% | 5% | 3% | 64% | 14% | 15% | 7% |
| 40-50% | 78% | 8% | 9% | 4% | 87% | 5% | 5% | 3% | 65% | 13% | 14% | 7% |
| 50-60% | 80% | 7% | 8% | 4% | 88% | 5% | 5% | 3% | 65% | 12% | 14% | 9% |
| 60-70% | 81% | 7% | 8% | 5% | 87% | 4% | 5% | 4% | 66% | 11% | 12% | 10% |
| 70-80% | 82% | 6% | 7% | 5% | 87% | 4% | 4% | 5% | 68% | 10% | 11% | 11% |
| 80-90% | 82% | 6% | 6% | 6% | 88% | 3% | 3% | 5% | 69% | 8% | 10% | 13% |
| Over 90% | 84% | 4% | 4% | 8% | 90% | 2% | 2% | 6% | 76% | 5% | 6% | 13% |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model

***Table A.2: Metropolitan Area Regional Distributions Across Income Decile and Tenure***

| | Homeowners with an Active Mortgage | | | | |
|---|---|---|---|---|---|
| Income Decile: | All Metrpolitan Areas | Metropolitan Areas in the Northeast Region | Metropolitan Areas in the Midwest Region | Metropolitan Areas in the West Region | Metropolitan Areas in the South Region |
| 0-10% | 68% | 10% | 14% | 27% | 18% |
| 10-20% | 66% | 10% | 13% | 26% | 16% |
| 20-30% | 68% | 10% | 15% | 27% | 16% |
| 30-40% | 69% | 11% | 15% | 27% | 16% |
| 40-50% | 71% | 12% | 16% | 26% | 17% |
| 50-60% | 72% | 12% | 16% | 26% | 17% |
| 60-70% | 74% | 13% | 16% | 26% | 19% |
| 70-80% | 77% | 15% | 16% | 27% | 20% |
| 80-90% | 82% | 17% | 16% | 28% | 22% |
| Over 90% | 89% | 20% | 14% | 29% | 25% |

| | Homeowners without an Active Motgage | | | | |
|---|---|---|---|---|---|
| Income Decile: | All Metrpolitan Areas | Metropolitan Areas in the Northeast Region | Metropolitan Areas in the Midwest Region | Metropolitan Areas in the West Region | Metropolitan Areas in the South Region |
| 0-10% | 53% | 9% | 10% | 24% | 10% |
| 10-20% | 57% | 12% | 12% | 22% | 11% |
| 20-30% | 58% | 12% | 13% | 22% | 11% |
| 30-40% | 60% | 13% | 13% | 23% | 12% |
| 40-50% | 62% | 13% | 13% | 23% | 12% |
| 50-60% | 63% | 14% | 13% | 23% | 13% |
| 60-70% | 65% | 15% | 13% | 24% | 13% |
| 70-80% | 67% | 16% | 13% | 24% | 14% |
| 80-90% | 72% | 18% | 13% | 26% | 15% |
| Over 90% | 79% | 20% | 13% | 28% | 17% |

| | Renters | | | | |
|---|---|---|---|---|---|
| Income Decile: | All Metrpolitan Areas | Metropolitan Areas in the Northeast Region | Metropolitan Areas in the Midwest Region | Metropolitan Areas in the West Region | Metropolitan Areas in the South Region |
| 0-10% | 74% | 15% | 14% | 25% | 19% |
| 10-20% | 75% | 15% | 14% | 26% | 21% |
| 20-30% | 78% | 15% | 13% | 27% | 22% |
| 30-40% | 81% | 16% | 13% | 28% | 24% |
| 40-50% | 82% | 18% | 12% | 26% | 26% |
| 50-60% | 83% | 19% | 12% | 26% | 27% |
| 60-70% | 85% | 20% | 10% | 26% | 29% |
| 70-80% | 87% | 21% | 9% | 24% | 32% |
| 80-90% | 89% | 23% | 8% | 25% | 34% |
| Over 90% | 91% | 28% | 7% | 23% | 32% |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model
Note: Percents will not add to 100% the denominator includes data for unincorporated areas and where geography is unknown

***Table A.3: Metropolitan Area Status Distributions Across Income Decile and Tenure***

| | Homeowners with an Active Mortgage | | | | Homeowners without an Active Motgage | | | | Renters | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Income Decile: | Non-Metropolitan Areas | Metropolitan Areas | Metropolitan Areas-Central City | Metropolitan Areas-Suburban | Non-Metropolitan Areas | Metropolitan Areas | Metropolitan Areas-Central City | Metropolitan Areas-Suburban | Non-Metropolitan Areas | Metropolitan Areas | Metropolitan Areas-Central City | Metropolitan Areas-Suburban |
| 0-10% | 23% | 68% | 12% | 26% | 35% | 53% | 9% | 19% | 19% | 74% | 24% | 18% |
| 10-20% | 25% | 66% | 11% | 25% | 33% | 57% | 8% | 22% | 18% | 75% | 22% | 22% |
| 20-30% | 24% | 68% | 11% | 26% | 31% | 58% | 8% | 23% | 15% | 78% | 22% | 24% |
| 30-40% | 22% | 69% | 11% | 28% | 30% | 60% | 8% | 25% | 13% | 81% | 22% | 27% |
| 40-50% | 21% | 71% | 11% | 30% | 28% | 62% | 8% | 26% | 13% | 82% | 22% | 29% |
| 50-60% | 20% | 72% | 10% | 32% | 27% | 63% | 9% | 27% | 12% | 83% | 23% | 30% |
| 60-70% | 18% | 74% | 10% | 34% | 25% | 65% | 9% | 28% | 10% | 85% | 24% | 31% |
| 70-80% | 15% | 77% | 9% | 37% | 19% | 67% | 9% | 31% | 9% | 87% | 24% | 34% |
| 80-90% | 11% | 82% | 10% | 42% | 23% | 72% | 10% | 34% | 7% | 89% | 26% | 36% |
| Over 90% | 7% | 89% | 47% | 12% | 14% | 79% | 11% | 38% | 6% | 91% | 31% | 33% |

Source: Urban Institute estimates using 2007 ACS Public Use Microdata applied to data generated by the Urban-Brookings Tax Policy Center Microsimulation Model
Note: Percents will not add to 100% the denominator includes data for unincorporated areas and where geography is unknown